Kit Plummer

Technology Architect & Software Engineer

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Profile

Technology executive who led Ditto from SBIR Phase I to \$28M STRATFI award, delivering edge-computing solutions to defense and intelligence customers. Expert in software supply-chain security, DevSecOps transformation, and distributed systems/edge-first architecture. Proven record scaling federal technology teams, securing multi-million dollar contracts, and translating complex technical solutions into business outcomes. Current TS-SCI clearance.

Skills

TECHNICAL EXPERTISE

- **Software Development:** Rust, Golang, JavaScript/TypeScript, Python, Java, Ruby, AI, Testing and Automation
- Cloud & Infrastructure: AWS, Azure Government Cloud, Kubernetes, Containers, Infrastructure-as-Code
- **DevSecOps & Security:** CI/CD Pipelines, GitOps, Software Supply-Chain Security, SBOM Generation, Vulnerability Assessment, Zero Trust Architecture
- Edge Computing & Distributed Systems: Peer-to-peer synchronization, Offline-first architectures, Mobile (iOS/Android), Embedded systems

LEADERSHIP & BUSINESS

- **Team Building:** Cross-functional team management, distributed workforce leadership, talent development, remote team scaling
- **Federal Business Development:** SBIR/STTR programs, TACFI/STRATFI awards, defense contracting, proposal writing
- **Strategic Planning:** Go-to-market strategy, product roadmapping, innovation culture development, technology evangelism
- **Stakeholder Management:** C-suite presentations, customer success, interdepartmental collaboration, conference speaking

Experience

Ditto | Chief Engineer, Federal | 2023-present

Development and delivery of Ditto's platform (cloud-to-edge) technology for federal customers.

- Received Defense Innovation Unit Success Memo for developing the Common Operational Datasync capability, enabling dynamic integration of multiple platform providers to swarm with different autonomy packages, reducing operational costs and eliminating a priori configuration
- Secured a \$28M STRATFI (Strategic Funding Increase) award to accelerate the delivery of Ditto technologies in support of various National Security objectives
- Delivered Ditto's TAK Edge Sync plugin to TAK.gov, providing peer-to-peer data synchronization to special operators around the world and enabling real-time data-sharing between partners
- Built the Federal unit's go-to-market strategy covering cloud operations, edge integration, and mobile deployments - highlighting Ditto's funding raises, delivery successes, and team growth

- Supported customer implementations across multiple platforms and technologies including iOS, Android, Rust, and JavaScript to ensure seamless integration and deployment
- Managed a cross-functional team of program and project managers, software engineers, customer success engineers, and business developers to deliver integrated solutions for federal clients
- Filed patents for innovative applications of Ditto technology in solving applied AI challenges, specifically addressing anomaly detection and the redistribution of retrained models
- Represented Ditto's Public Sector team at many defense and intelligence exercises, test events and conferences

Microsoft Federal | Director, Modern Software Engineering and DevSecOps | 2022-2023

Created and executed Microsoft's go-to-market DevSecOps strategy in support of Azure Government Cloud capabilities by focusing on engineers, developers and researchers within the federal partner ecosystem.

Georgia Tech Research Institute (GTRI) | *Principal Research Engineer* | **2017-2022**

- Chief Engineer for Air National Guard/Air Force Reserve Test Center's Corsair Ranch software factory and Platform One liaison, supporting F-16, A-10, HH-60 platforms
- Developed software supply-chain risk analysis tooling (lowendinsight.dev) for large-scale library vulnerability assessment
- Chief Engineer for Delta's new In-Flight Entertainment system on Airbus A330-900 fleet, managing crossorganizational engineering teams
- Established DevUP organizational improvement function and taught *DevSecOps and Military Applications* at GT Professional Education
- Led business development, white papers, and conference speaking to advance software factory and DevSecOps adoption

Ion Channel | *Founder/CTO* | **2015-2017**

Business development and award of multiple \$1M+ contracts with various intelligence community agencies, addressing software supply-chain requirements and source-code cybersecurity.

- Established and staffed engineering team in Portland OR focusing on 'product'-oriented development
- Coordinated initial feature requirements from customer/system/process consulting and analysis
- Led engineering team through dev tools, process and methods selection
- Rolled out continuous delivery infrastructure and processes to automate delivery of source and artifacts to customers

Design and development of initial software supply-chain product/service offerings

- Microservices-based architecture targeting AWS infrastructure with automated test and delivery
- Services written in Ruby and Golang deployed with Docker containers to AWS ECR/ECS
- Integration with upstream data providers (NIST NVD, language ecosystems, GitHub) and ingest to local datastores
- API, CLI, and UI development to support governance, risk and compliance operations in multiple operational targets

AirGap / RadiantBlue Technologies | Chief Engineer | 2012-2015

Consulted organizations on the "modern software engineering" enterprise

- Communicating the need for enterprises to accommodate a flexible culture, to accommodate technology change, preventing debt and allowing for the right tool to be applied to the job at hand
- Analyzing existing processes and documenting infrastructure and automation opportunities
- Training on infrastructure-as-code tools (i.e., Puppet, Chef, Ansible) and cloud and container tools (Openstack and Docker)

Developed open source alternative solutions for defense and intelligence systems, to enable rapid and emergent innovation opportunities

Utilizing public and private cloud technologies (e.g. Amazon Web Services(AWS): EC2, S3/Glacier,

Route53, RDS, etc.; Heroku PaaS; OpenShift) as well as emerging technologies such as NoSQL, mapreduce, and dynamic software frameworks

- Consulting on continuous integration, continuous delivery (CI/CD) and infrastucture-as-code (IaC) practices
- Supporting open source operations, serving as a board member at The Codice Foundation
- Working with the Distributed Data Framework project, providing Puppet and AWS support to support dynamic provision and auto-configuration of large-scale deployments

Led development and operation of a workflow automation engine for delivery of software components

- Architected and implemented private cloud infrastructure based on Openstack, Puppet and Docker, and augmented by AWS compute and storage resources
- Designed a workflow engine for distributed task operations using Mongo, Grails, PostgreSQL, and Activiti
- Developed Ruby microservices connecting external data sources (e.g. NIST vulnerability database, VirusTotal, fossology)
- Worked with agencies to capture security process/audit, transport, and component manifesting requirements
- Integrating Amazon Web Services for elastic test agents, and disaster recovery flows for system images and software artifacts

MaestroDev | VP, Product Engineering | 2011-2012

Led the design and development of a DevOps tool suite to support emerging enterprise markets with software development-through-operations workflow automation

- Managed a globally distributed staff of software engineers, designers, technical writers, and administrators
- Communicated with executive stakeholders regarding strategy, execution and operational needs
- Worked with customers and test sites to optimize the delivery, monitoring and operation of system components
- Built a Ruote-based workflow engine that integrated best-of-breed tools in the SCM, CI, deployment, provisioning and configuration management arena

Dozer Software LLC | Principal | 2000-2017

 Provided rapid prototyping, system design, and software engineering services to local, defense and mining organizations

Accenture National Security Services | *Technical Architect* | **2007-2010**

Developed a semantic wiki/text engineering platform for document/intelligence inference for US ARMY CDI

- Processing document similarity and entity extraction algorithms to create "linkable" relationships
- Integrating open source projects Grails, GATE, UIMA, Tika, Jena to minimize costs and license constraints
- Architected for component distribution and high-scalability using publish-subscribe/XML/RDF interconnects

Architected and designed a dynamic data discovery and visualization service platform for USAF (SAF)

- Utilizing off-the-shelf software frameworks (Grails and OSGi) for maximum developmental performance
- Implemented multiple search algorithms to identify location/geo-based and other information
- Following Scrum agile software engineering methodology with geo-distributed team

Established and architected an open source contextual collaboration suite for the USAF

- Developed early prototype using Java/OSGi frameworks and HTTP interfaces
- Ported design to Ruby and Rails, RESTful, and Service-Oriented Architecture
- Published whitepapers and spoke at various Open Source and defense conferences and symposiums

Raytheon Missile Systems | Principal Software Engineer | 2003-2007

• Developed tactically-aware service integration platform based on Enterprise Service Bus architecture

- Lead engineer for unmanned system mission computer/processing platform development and flight testing
- Created SDK (API, documentation, tooling) and multi-level security mechanisms for service developers
- Co-chaired Communications Technology Interest Group, fostering open source adoption in defense systems

Early Career | Systems Engineer, Instructor, IT Manager | 1990-2003

Systems Integration Plus (Systems Engineer), ITT Technical Institute (Adjunct Instructor), Pilot2Pilot Inc. (President), Marine Corps Community Services (IT Special Projects Manager), United States Air Force (Wideband/Satellite Radio Technician)

Education

University of Maryland | Adelphi, Maryland | **December 2008** Master of Software Engineering

University of Maryland | Kadena AB, Okinawa | **October 1999** Bachelor of Science in Computer Studies

University of Arkansas | Camp Foster, Okinawa | September 1999 Completed training, course work and requisite projects for mid-level management certification

Green Hills Software | Tucson, AZ | **October 2003** Completed training and certification for Integrity RTOS

Redhat | San Francisco, CA | **May 2001** Completed RHCE training and certification

Wind River Systems | Alameda, California | **September 2001** Completed coursework covering VxWorks 5.4 and Tornado 2.0

Activities

OVMTB High School Mountain Bike Team, Founder and Board Member National Interscholastic Cycling Association, Level I Certified Coach